

limitations. Without such a teaching of all of the claim limitations, one of skill in the art would lack the guidance necessary to arrive at the invention.

In view of the foregoing Applicant respectfully requests removal of the rejection.

**G. Conclusion**

This is submitted to be a complete response to the referenced Office Action. In conclusion, Applicant submits that, in light of the foregoing remarks, the present case is in condition for allowance and such favorable action is respectfully requested.

The Examiner is invited to contact the undersigned at (512)536-3085 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,



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## APPENDIX A: MARKED VERSION OF AMENDMENTS

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### In the Specification:

Please replace the paragraph beginning at page 5, line 13, with the following:

-- The invention also concerns seed of the inbred corn variety I015036. A sample of this seed has been deposited under ATCC Accession [No. - - - -] No. PTA-3225. The inbred corn seed of the invention may be provided as an essentially homogeneous population of inbred corn seed of the variety designated I015036. Essentially homogeneous populations of inbred seed are those that consist essentially of the particular inbred seed, and are generally free from substantial numbers of other seed, so that the inbred seed forms between about 90% and about 100% of the total seed, and preferably, between about 95% and about 100% of the total seed. Most preferably, an essentially homogeneous population of inbred corn seed will contain between about 98.5%, 99%, 99.5% and about 99.9% of inbred seed, as measured by seed grow outs. This corresponds to current commercial practice among the leading companies in the seed industry.--

Please replace the paragraph beginning at page 10, line 18, with the following:

-- In still yet another aspect, the present invention provides a method of producing an inbred corn plant derived from the corn variety I015036, the method comprising the steps of: (a) preparing a progeny plant derived from corn variety I015036, wherein said preparing comprises crossing a plant of the corn variety I015036 with a second corn plant, and wherein a sample of the seed of corn variety I015036 has been deposited under ATCC Accession [No. - - - -] No. PTA-3225; (b) crossing the progeny plant with itself or a second plant to produce a seed of a progeny plant of a subsequent generation; (c) growing a progeny plant of a subsequent generation

from said seed of a progeny plant of a subsequent generation and crossing the progeny plant of a subsequent generation with itself or a second plant; and (d) repeating steps (c) and (d) for an addition 3-10 generations to produce an inbred corn plant derived from the corn variety I015036. In the method, it may be desirable to select particular plants resulting from step (c) for continued crossing according to steps (b) and (c). By selecting plants having one or more desirable traits, an inbred corn plant derived from the corn variety I015036 is obtained which possesses some of the desirable traits of corn variety I015036 as well potentially other selected traits.--

Please replace the paragraph beginning at page 22, line 17, with the following:

-- **I015036:** The corn plant variety from which seeds having ATCC Accession [No. - - - -] No. PTA-3225 were obtained, as well as plants grown from those seeds.--

Please replace the paragraph beginning at page 29, line 8, with the following:

--A representative deposit of 2500 seeds of the inbred corn variety designated I015036 has been made with the American Type Culture Collection (ATCC), 10801 University Blvd., Manassas, VA on [(\_\_\_\_\_, \_\_\_\_)] March 26, 2001. Those deposited seeds have been assigned ATCC Accession [No. - - - -] No. PTA-3225. The deposit was made in accordance with the terms and provisions of the Budapest Treaty relating to deposit of microorganisms and was made for a term of at least thirty (30) years and at least five (05) years after the most recent request for the furnishing of a sample of the deposit is received by the depository, or for the effective term of the patent, whichever is longer, and will be replaced if it becomes non-viable during that period.--

**In the Claims:**

Please amend claims 16, 19 and 22 as follows:

16. (Amended) The corn plant of claim 15, further comprising a nuclear or cytoplasmically-inherited gene conferring male sterility.

19. (Amended) The tissue culture of claim 18, wherein the regenerable cells [comprise] are in the form of protoplasts or callus cells.

22. (Twice Amended) The process of claim 21, further defined as a process of producing F1 hybrid corn seed, comprising crossing a first inbred corn plant with a second, distinct inbred corn plant, wherein the first or second inbred corn plant is a plant of the corn variety I015036, wherein a sample of the seed of the corn variety I015036 was deposited under ATCC Accession No. PTA-3225.



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APPENDIX B: CLEAN COPY OF CLAIMS

1. A seed of the corn variety I015036, wherein a sample of the seed of the corn variety I015036 was deposited under ATCC Accession No. PTA-3225.
2. A population of seed of the corn variety I015036, wherein a sample of the seed of the corn variety I015036 was deposited under ATCC Accession No. PTA-3225.
3. The population of seed of claim 2, further defined as an essentially homogeneous population of seed.
4. The population of seed of claim 2, further defined as essentially free from hybrid seed.
5. A corn plant produced by growing a seed of the corn variety I015036, wherein a sample of the seed of the corn variety I015036 was deposited under ATCC Accession No. PTA-3225.
6. The corn plant of claim 5, having:
  - (a) an SSR profile in accordance with the profile shown in Table 6; or
  - (b) an isozyme typing profile in accordance with the profile shown in Table 7.
7. A plant part of the corn plant of claim 5.
8. The plant part of claim 7, further defined as pollen.
9. The plant part of claim 7, further defined as an ovule.
10. The plant part of claim 7, further defined as a cell.
11. The plant part of claim 10, wherein said cell is further defined as having :
  - (a) an SSR profile in accordance with the profile shown in Table 6; or

(b) an isozyme typing profile in accordance with the profile shown in Table 7.

12. A seed comprising the cell of claim 10.
13. A tissue culture comprising the cell of claim 10.
14. An essentially homogeneous population of corn plants produced by growing the seed of the corn variety I015036, wherein a sample of the seed of the corn variety I015036 was deposited under ATCC Accession No. PTA-3225.
15. A corn plant capable of expressing all the physiological and morphological characteristics of the corn variety I015036, wherein a sample of the seed of the corn variety I015036 was deposited under ATCC Accession No. PTA-3225.
16. The corn plant of claim 15, further comprising a nuclear or cytoplasmically-inherited gene conferring male sterility.
17. A tissue culture of regenerable cells of a plant of corn variety I015036, wherein the tissue is capable of regenerating plants capable of expressing all the physiological and morphological characteristics of the corn variety I015036, wherein a sample of the seed of the corn variety I015036 was deposited under ATCC Accession No. PTA-3225.
18. The tissue culture of claim 17, wherein the regenerable cells comprise cells derived from embryos, immature embryos, meristematic cells, immature tassels, microspores, pollen, leaves, anthers, roots, root tips, silk, flowers, kernels, ears, cobs, husks, or stalks.
19. The tissue culture of claim 18, wherein the regenerable cells are in the form of protoplasts or callus cells.

20. A corn plant regenerated from the tissue culture of claim 17, wherein the corn plant is capable of expressing all of the physiological and morphological characteristics of the corn variety designated I015036, wherein a sample of the seed of the corn variety I015036 was deposited under ATCC Accession No. PTA-3225.

21. A process of producing corn seed, comprising crossing a first parent corn plant with a second parent corn plant, wherein one or both of the first or the second parent corn plant is a plant of the corn variety I015036, wherein a sample of the seed of the corn variety I015036 was deposited under ATCC Accession No. PTA-3225, wherein seed is allowed to form.

22. The process of claim 21, further defined as a process of producing F1 hybrid corn seed, comprising crossing a first inbred corn plant with a second, distinct inbred corn plant, wherein the first or second inbred corn plant is a plant of the corn variety I015036, wherein a sample of the seed of the corn variety I015036 was deposited under ATCC Accession No. PTA-3225.

23. The process of claim 22, wherein crossing comprises the steps of:

- (a) planting the seeds of first and second inbred corn plants;
- (b) cultivating the seeds of said first and second inbred corn plants into plants that bear flowers;
- (c) preventing self pollination of at least one of the first or second inbred corn plant;
- (d) allowing cross-pollination to occur between the first and second inbred corn plants; and
- (e) harvesting seeds on at least one of the first or second inbred corn plants, said seeds resulting from said cross-pollination.

24. Hybrid corn seed produced by the process of claim 23.

25. A hybrid corn plant produced by growing a seed produced by the process of claim 23.

26. The hybrid corn plant of claim 25, wherein the plant is a first generation ( $F_1$ ) hybrid corn plant.
27. The corn plant of claim 5, further defined as having a genome comprising a single locus conversion.
28. The corn plant of claim 27, wherein the single locus was stably inserted into a corn genome by transformation.
29. The corn plant of claim 27, wherein the locus is selected from the group consisting of a dominant allele and a recessive allele.
30. The corn plant of claim 27, wherein the locus confers a trait selected from the group consisting of herbicide tolerance; insect resistance; resistance to bacterial, fungal, nematode or viral disease; yield enhancement; waxy starch; improved nutritional quality; enhanced yield stability; male sterility and restoration of male fertility.
31. A method of producing an inbred corn plant derived from the corn variety I015036, the method comprising the steps of:
- (a) preparing a progeny plant derived from corn variety I015036 by crossing a plant of the corn variety I015036 with a second corn plant, wherein a sample of the seed of the corn variety I015036 was deposited under ATCC Accession No. PTA-3225;
  - (b) crossing the progeny plant with itself or a second plant to produce a seed of a progeny plant of a subsequent generation;
  - (c) growing a progeny plant of a subsequent generation from said seed and crossing the progeny plant of a subsequent generation with itself or a second plant; and
  - (d) repeating steps (b) and (c) for an addition 3-10 generations to produce an inbred corn plant derived from the corn variety I015036.